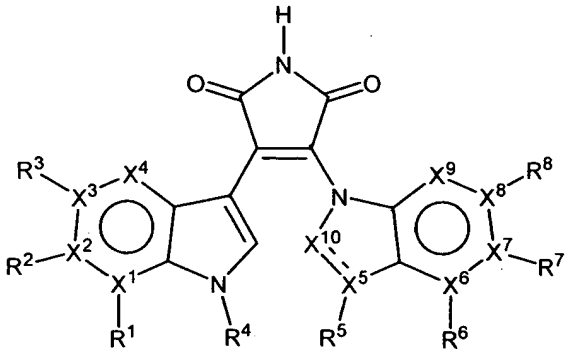
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions of claims in the application.

1-30 (cancelled).

1. (new) A compound represented by the following formula:



or a pharmaceutically acceptable salt thereof
wherein:

X^1 - X^3 are independently C or N;
X^4 is CH or N, wherein not more than two of X^1 - X^4 is N;
X^6 - X^8 are independently C or N;
X^9 is CH or N, wherein not more than two of X^6 - X^9 is N;

X^5 is N, R^5 is a lone pair, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond; or
X^5 is CH, R^5 is H, and X^{10} is CH_2, when the bond between X^5 and X^{10} is a single bond; or
X^5 is C, R^5 is defined below, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond;

R^1-R^3 and R^6-R^8 represent a lone pair or O when each respective X^1-X^3 and X^6-X^8 is N; or when X^1 - X^3 or X^6 - X^8 is C, each respective R^1 - R^3 and R^6 - R^8 is independently selected from the group consisting of:

a) H, substituted or unsubstituted C(1-8) alkyl, halogen, azido, cyano, nitro, or $NR^{21}R^{22}$, wherein R^{21} represents H or C(1-8) alkyl, and R^{22} represents H, substituted or unsubstituted C(1-8) alkylcarbonyl, substituted or unsubstituted arylcarbonyl, heterocycle, substituted or unsubstituted heteroarylcarbonyl, substituted or unsubstituted C(1-8) alkylaminocarbonyl, substituted or unsubstituted arylaminocarbonyl;

b) OR^{23}, wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl;

c) SR^{23}, wherein R^{23} is defined as in b);

d) $O(CH_2)_j$-R^{24}, $O(CH_2)_j$-O-R^{24}, or $O(CH_2)_j$-S-R^{24}, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl;

e) $S(CH_2)_jR^{24}$, $S(CH_2)_j$-O-R^{24}, or $S(CH_2)_j$-S-R^{24}, wherein j and R^{24} are defined as in d);

f) C≡C-R^{25}, C≡C-OR^{25}, or C≡C-CO_2R^{25}, wherein R^{25} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

g) CH=CH-R^{25}, CH=CH-OR^{25}, or CH=CH-CO_2R^{25}, having a stereochemistry of E or Z, and R^{25} is defined as in f);

h) C≡C-$NR^{25}R^{26}$ or C≡C$CONR^{25}R^{26}$, wherein R^{25} is defined as in f), and R^{26} is defined as R^{25}, and R^{25} and R^{26} are selected independently;

i) CH=CH-$NR^{25}R^{26}$ or CH=CH$CONR^{25}R^{26}$, having a stereochemistry of E or Z, wherein R^{25} and R^{26} are independently defined as in h);

j) $(CH_2)_kR^{25}$, $(CH_2)_k$-$COOR^{25}$, or $(CH_2)_k$-OR^{25}, wherein k is an integer from 2 to 6 and R^{25} is defined as in f);

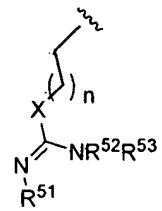
k) $(CH_2)_kNR^{25}R^{26}$, $(CH_2)_kCONR^{25}R^{26}$, wherein R^{25} and R^{26} are selected independently, and R^{25} and R^{26} are defined as R^{25} in f); and

l) CH_2XR^{27}, wherein X is O or S and R^{27} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R^4 is selected from the group consisting of:

m) H, substituted or unsubstituted C(1-8) alkyl; and

n)



wherein X=O, S, or NH, n=1 to 4; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system;

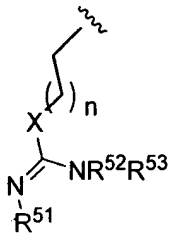
R^5 is selected from the group consisting of:

o) a lone pair when X^5 is N; or

when X^5 is C, R^5 is selected from the group consisting of:

p) H, substituted and unsubstituted C(1-8) alkyl; and

q)



wherein X=O, S, or NH, n=1 to 4; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system; or

wherein when R^1-R^3 and R^5-R^8 are H, and R^4 is H or CH_3, then at least one of $X^1 - X^9$ represents a ring member other than carbon.

2. (new) A compound, according to claim 1, in which X^1 - X^3 are independently C.

3. (new) A compound, according to claim 1, in which X^4 is CH.

4. (new) A compound, according to claim 1, in which X^6 - X^8 are independently C.

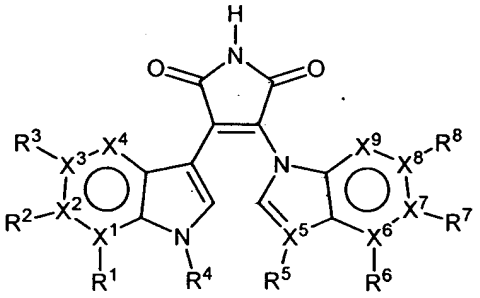
5. (new) A compound, according to claim 1, in which X^9 is CH or N.

6. (new) A compound, according to claim 1, in which X^5 is C, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

7. (new) A compound, according to claim 1, in which X^5 is N, R^5 is a lone pair, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

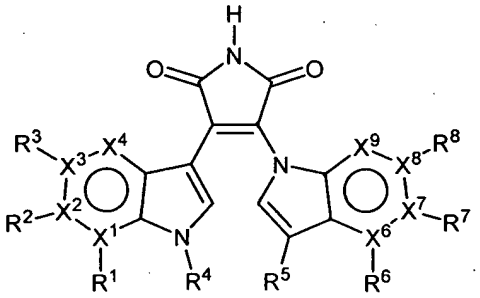
8. (new) A compound, according to claim 1, in which X^5 is CH, R^5 is H, X^{10} is CH_2 and the bond between X^5 and X^{10} is a single bond.

9. (new) A compound having the following formula:



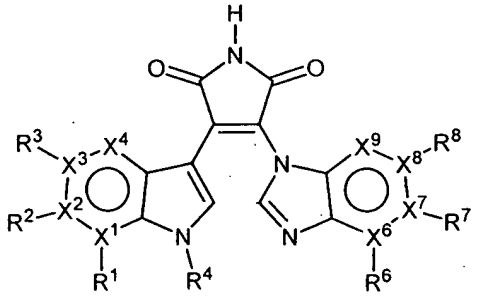
wherein X^5 is C or N, and X^1-X^3, X^4, X^6-X^8, R^1-R^3, R^4, R^5 and R^6-R^8 are as defined in claim 1.

10. (new) A compound having the following formula:



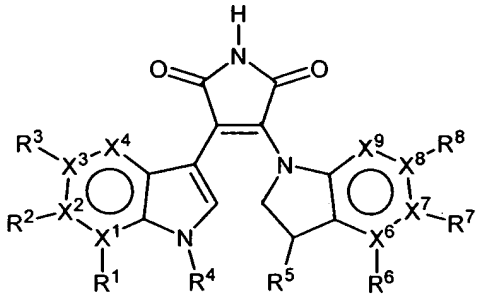
wherein X^1-X^3, X^4, X^6-X^8, R^1-R^3, R^4, R^5 and R^6-R^8 are as defined in claim 1.

11. (new) A compound having the following formula:



wherein X^1-X^3, X^4, X^6-X^8, R^1-R^3, R^4, R^5 and R^6-R^8 are as defined in claim 1.

12. (new) A compound having the following formula:



wherein X^1-X^3, X^4, X^6-X^8, R^1-R^3, R^4, R^5 and R^6-R^8 are as defined in claim 1.

13. (new) A compound, according to claim 1, in which when X^1 - X^3 or X^6 - X^8 is C, each respective R^1 - R^3 and R^6 - R^8 is independently selected from the group consisting of:

a) H, halogen;

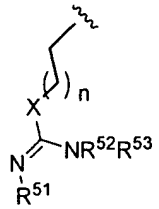
b) OR^{23}, wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl; and

d) $O(CH_2)_j$-R^{24}, $O(CH_2)_j$-O-R^{24}, or $O(CH_2)_j$-S-R^{24}, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl.

14. (new) A compound, according to claim 1, in which R^4 is selected from the group consisting of:

m) H, substituted or unsubstituted C(1-8) alkyl; and

n)

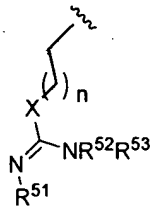


wherein X=O, S, or NH, n=2; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

15. (new) A compound, according to claim 14, in which R^4 is selected from the group consisting of:

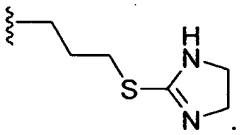
m) H, substituted or unsubstituted C(1-8) alkyl; and

n)



wherein X=S, n=2; and wherein R^{51} is H; R^{52} and R^{53} are both H, or R^{51} and R^{52} are combined to form a heteroaryl ring system.

16. (new) A compound, according to claim 15, in which R^4 is selected from the group consisting of: H, methyl, $CH_2CH_2CH_2OH$, $CH_2CH_2CH_2NH_2$, $CH_2CH_2CH_2N_3$,

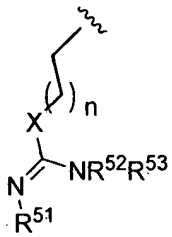
$CH_2CH_2CH_2SC(=NH)NH_2$ and  .

17. (new) A compound, according to claim 1, in which X^5 is N and R^5 is a lone pair.

18. (new) A compound, according to claim 1, in which X^5 is C or CH, and R^5 is selected from the group consisting of:

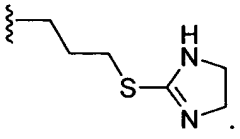
p) H, substituted and unsubstituted C(1-8) alkyl; and

q)



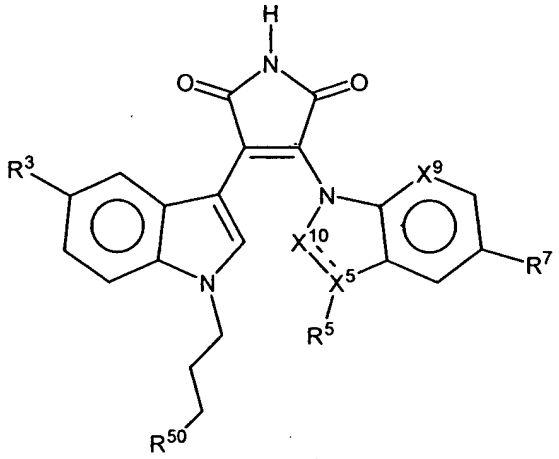
wherein X=S, n=2; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

19. (new) A compound, according to claim 18, in which X^5 is C or CH, and R^5 is selected from the group consisting of H, methyl, $CH_2CH_2CH_2OH$, $CH_2CH_2CH_2SC(=NH)NH_2$,



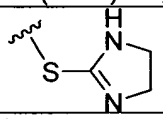
$CH_2CH_2CH_2N(CH_3)_2$, $CH_2CH_2CH_2N_3$, $CH_2CH_2CH_2NH_2$, and .

20. (new) A compound, according to the following formula

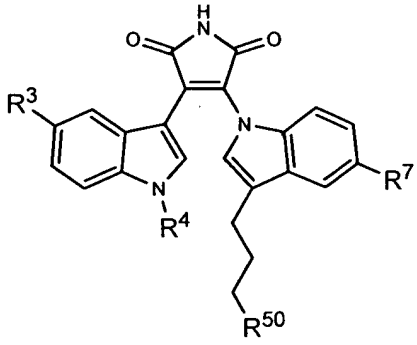


selected from the group consisting of:

Cpd.	Bond between X^5/X^{10}	R^3	R^{50}	R^7	X^5/R^5	X^9	X^{10}
121	Double	H	-OH	H	CH	CH	CH
124	Double	BnO	-OH	H	CH	CH	CH
125	Double	H	-OH	H	CMe	CH	CH
126	Double	H	-OH	BnO	CH	CH	CH
127	Double	H	-OH	H	CH	CH	CMe
128	Double	H	-OH	H	N	CH	CH
129	Double	BnO	-OH	H	CMe	CH	CH
130	Double	H	-OH	H	CH	N	CH
131	Double	BnO	-OH	H	CH	CH	CMe
132	Double	H	-OH	F	CH	CH	CH
133	Double	H	$-N(CH_3)_2$	H	CH	CH	CH
136	Double	BnO	$-N(CH_3)_2$	H	CH	CH	CH
137	Double	H	$-N(CH_3)_2$	H	CMe	CH	CH
138	Double	H	$-N(CH_3)_2$	BnO	CH	CH	CH
139	Double	H	$-N(CH_3)_2$	H	CH	CH	CMe
140	Double	H	$-N(CH_3)_2$	H	N	CH	CH
141	Double	BnO	$-N(CH_3)_2$	H	CMe	CH	CH
142	Double	H	$-N(CH_3)_2$	H	CH	N	CH
143	Double	H	$-SC(=NH)NH_2$	H	CH	CH	CH

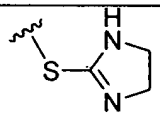
Cpd.	Bond between X^5/X^{10}	R^3	R^{50}	R^7	X^5/R^5	X^9	X^{10}	
146	Double	H	-SC(=NH)NH_2	H	CMe	CH	CH	;
147	Double	H	-SC(=NH)NH_2	BnO	CH	CH	CH	;
148	Double	BnO	-SC(=NH)NH_2	H	CH	CH	CH	;
149	Double	BnO	-SC(=NH)NH_2	H	CH	CMe	CH	;
150	Double	BnO	-SC(=NH)NH_2	H	CH	CH	CMe	;
151	Double	H	-SC(=NH)NH_2	H	CH	CH	CMe	;
152	Double	H	-SC(=NH)NH_2	H	CH	N	CH	;
153	Double	MeO	-SC(=NH)NH_2	H	CH	CH	CH	;
154	Double	F	-SC(=NH)NH_2	H	CH	CH	CH	;
155	Double	H	-SC(=NH)NH_2	F	CH	CH	CH	;
156	Double	H		H	CH	CH	CH	;
159	Single	H	-SC(=NH)NH_2	H	CH_2	CH	CH_2	;
160	Double	OCH_2S Ph	-SC(=NH)NH_2	H	CH	CH	CH	;
161	Double	H	$-N_3$	H	CH	CH	CH	; and
162	Double	H	$-NH_2$	H	CH	CH	CH	.

21. (new) A compound according to the following formula:



selected from the group consisting of:

Example	R^3	R^{50}	R^7	R^4	
163	H	OH	H	H	;
164	H	OH	H	Me	;
165	BnO	OH	H	H	;
166	H	SC(=NH)NH_2	H	H	;

167	H	$SC(=NH)NH_2$	H	Me	;
168	BnO	$SC(=NH)NH_2$	H	Me	;
169	H	$N(CH_3)_2$	H	Me	;
170	H		H	Me	;
171	H	N_3	H	Me	; and
172	H	NH_2	H	Me	.

22.(new) A composition comprising a compound, according to claim 1, in combination with carrier.

23. (new) The composition, according to claim 22, further including a chemotherapeutic agent.

24. (new) The composition, according to claim 22, further including a cytokine.

25. (new) The composition, according to claim 22, further including anti-sense oligonucleotides.

26. (new) A method of treating an inflammatory disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the disorder.

27. (new) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the cancer.

28. (new) A method of treating a cell proliferative disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat the disorder.

29. (new) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, in combination with another chemotherapeutic agent.

30. (new) Use of a compound or a composition, according to claim 1 or 22, so as to induce apoptosis in Jurkat cells.

31. (new) Use of a compound or a composition, according to claim 1 or 22, so as to induce apoptosis in cancer cell lines.

32. (new) The use, according to claim 31, in which the cancer cell lines are prostate cancer and breast cancer cell lines

33. (new) A method of treatment or prevention of a condition resulting from loss of growth and cellular differentiation control, the method comprising: administration to a subject in need thereof an effective amount of a compound or a composition, according to claim 1 or 22, so as to treat or prevent the condition.